

**Claim Listing**

The Claim Listing below will replace all prior versions of the claims in the application:

- 1-3. (Canceled)
4. (Original) A method for preserving a living organ, comprising incubating the organ in a solution of S-nitrosated hemoglobin and low molecular weight thiol.
- 5-15. (Canceled)
16. (Previously presented) A method for delivering NO in a mammal, comprising administering to the mammal an effective amount of a blood substitute comprising S-nitrosohemoglobin.
17. (Original) The method of Claim 16, in which the blood substitute comprises S-nitrosohemoglobin and low molecular weight S-nitrosothiol.
18. (Previously presented) A method for scavenging oxygen free radicals and NO $\cdot$  in a mammal, comprising administering to the mammal an effective amount of a blood substitute comprising S-nitrosohemoglobin.
19. (Previously presented) A method for reducing blood pressure in a mammal, comprising administering an effective amount of SNO-Hb to the mammal.
20. (Previously presented) A method for treating a disease in a mammal, comprising administering an effective amount of SNO-Hb to the mammal, wherein the disease is selected from the group consisting of heart disease, vascular disease, atherosclerosis, lung disease and inflammation.

21. (Previously presented) A method for treating a medical condition in a mammal, comprising administering an effective amount of SNO-Hb to the mammal, wherein the medical condition is selected from the group consisting of stroke, angina and acute respiratory distress.
22. (Previously presented) A method for enhancing the preservation of an excised organ, comprising storing the organ in a solution comprising an effective amount of SNO-Hb(FeII)O<sub>2</sub>.
23. (Previously presented) A method for treating a human with sickle cell anemia comprising administering to the human an effective amount of a preparation comprising SNO-Hb(FeII)O<sub>2</sub>.
24. (Original) The method of Claim 23 in which the preparation comprises SNO-Hb(FeII)O<sub>2</sub> and a thiol.
25. (Original) The method of Claim 23 in which the preparation comprises SNO-Hb(FeII)O<sub>2</sub> and an S-nitrosothiol.
26. (Original) A method for treating a patient having a disease or medical condition characterized by abnormalities of nitric oxide and oxygen metabolism, comprising administering to the patient an effective amount of a preparation comprising SNO-Hb.
27. (Previously presented) The method of Claim 26 in which the disease or medical condition is selected from the group consisting of: heart disease, lung disease, sickle-cell anemia, stroke and organ transplantation.

28. (Previously presented) A method for treating acute respiratory distress in a mammal, comprising administering to the mammal an effective amount of SNO-Hb[FeII] or SNO-Hb[FeIII].
29. (Previously presented) A method for causing vasodilation in a mammal, comprising administering to the mammal SNO-Hb(FeII).
30. (Previously presented) A method for regulating delivery of oxygen and NO, in various redox forms, in a mammal, comprising administering to the mammal an effective amount of a preparation comprising a low molecular weight thiol or nitrosothiol and S-nitrosohemoglobin.
- 31-32. (Canceled)
33. (Previously presented) A method for preparing a composition comprising SNO-Hb[FeII]O<sub>2</sub>, said method comprising incubating excess S-nitrosocysteine, S-nitrosohomocysteine, S-nitrosocysteinyglycine, or S-nitrosoglutathione with purified hemoglobin in the presence of oxygen at a pH of about 7.4 to about 9.2.
34. (Previously presented) A method for preparing a composition comprising SNO-Hb[FeII], said method comprising incubating excess S-nitrosocysteine, S-nitrosohomocysteine, S-nitrosocysteinyglycine, or S-nitrosoglutathione with purified hemoglobin in the absence of oxygen at a pH of about 7.4 to about 9.2.